Section - B

(Short Answers)

Note: Answer any Eight of the following questions. Each question carries 05 marks.

- Q.2 Enlist the name of branches of Chemistry and define any two of them.
- Q.3 C-14 and N+14 both have same mass number yet they are different elements. Explain.
- Q.4 \ What are lanthanides and actinides?
- Q.5 What are the valence electrons of an atom? How many valence does a nitrogen atom passes?
- Q.6 What is Brownian movement? Describe with example.
- Q.7 What is the difference between a primary and secondary cell?
- Q.8 What is potable water? Write four main characteristics of potable water.
- Q.9 How ethane is prepared from ethyl alcohol?
- Q.10 Calculate the pH and pOH of a solution whose (H*) ion concentration is 3.0 x 10⁻² moles / litre.
- Q.11 Define any five chemical differences between Metals and Non-metals.
- Q.12 Nitric acid is an important chemical compound. Give any five uses of nitric acid.
- Q.13 Balance the following chemical equations.
 - (i) Ca + H₂O Ca (OH)₂ + H₂

 - (iv) $CO + O_2 \longrightarrow CO_2$
 - (v) Fe + H_2O \longrightarrow Fe₃O₄ + H_2

Section - C

(Descriptive Answers)

Note: Answer any TWO of the following question. Each question carries 14 (7 + 7) marks.

Q.14 (a) What is chemical reaction? How many types of chemical reaction? Explain any two reactions with examples.

- (b) What common properties are shown by ionic compound?
- Q.15 (a) State and explain Faraday's First Law of Electrolysis.
 - (b) State Exothermic and Endothermic reaction. Give any two examples.
- Q.16 (a) Differentiate between any one of the following.

Diamond and Graphite

Wrought iron and Steel

(b) How methane is prepared? Give its properties.